

# Linguistic Correlates of Proficiency (LCP)



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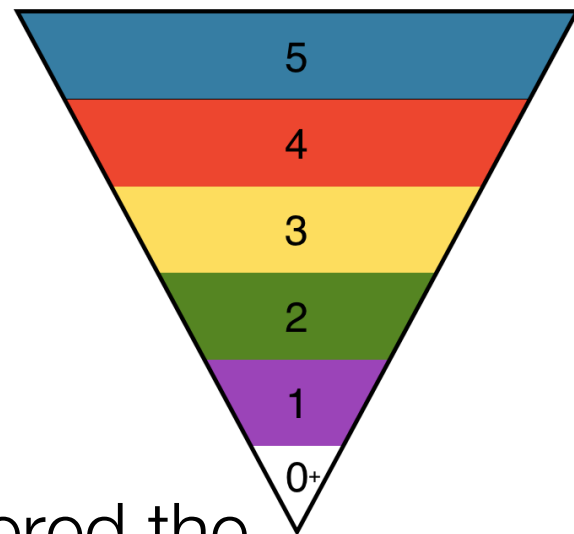
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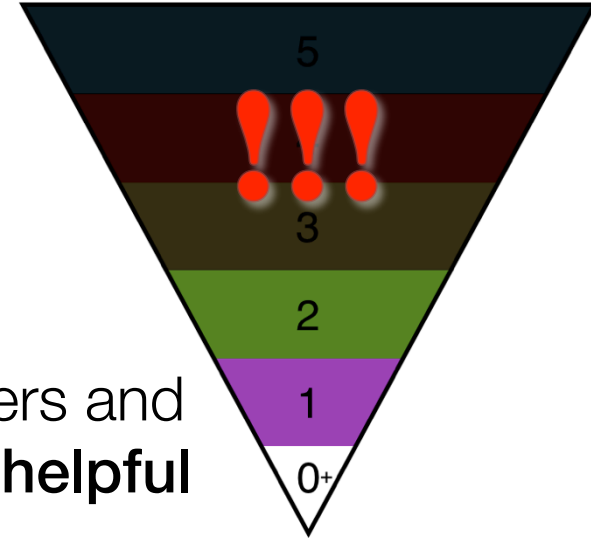
# Background

- Interagency Language Roundtable (ILR) scale widely used in U.S.
- **ILR 3** (on a scale of 0–5) is considered the minimum acceptable level for professional proficiency in **less commonly taught languages** (LCTLs) (Brecht & Rivers, 2005)
- e.g., Russian, Chinese, Persian, Arabic, Korean



# Motivation

- The majority of LCTL learners **do not go beyond ILR 2**, even after many years of study (Long, Gor & Jackson, 2012)
- While the ILR scale is attractive to end users and test administrators, these scales are **less helpful for learners and instructors**
- Few data exist as to the **appropriate linguistic competence for the different ILR levels**—especially at the advanced levels for LCTLs
- Practical need for **diagnostic** to add linguistic detail to ILR proficiency scores



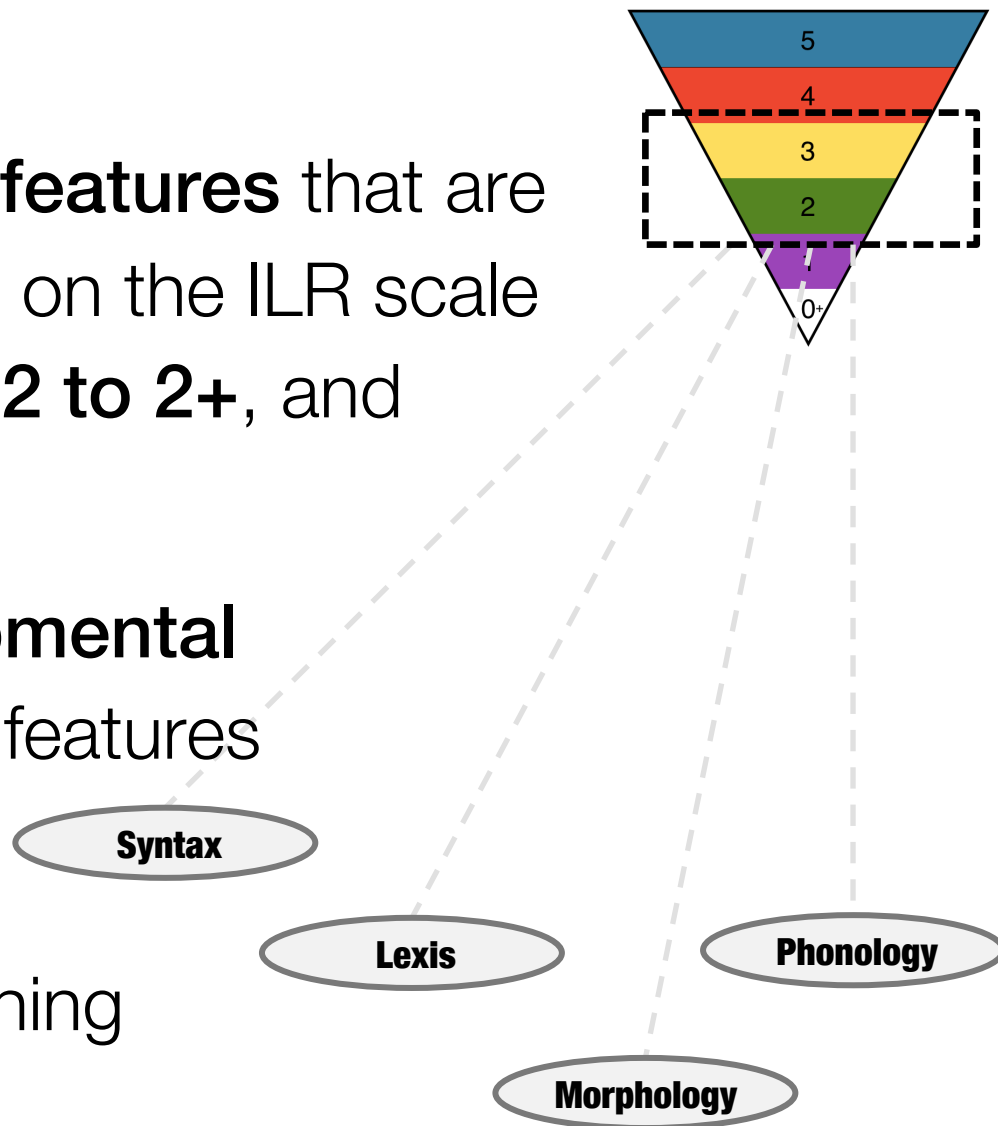
# Longterm goals of LCP project

## Primary:

- To **identify linguistic features** that are implicated in progress on the ILR scale (specifically, from **ILR 2 to 2+**, and from **ILR 2+ to 3**)
- To **establish developmental trajectories** for these features

## Secondary:

- Improve learning/teaching



# Construct

- The underlying construct is defined as **having knowledge in different linguistic domains** in terms of both **accuracy** and **automaticity**.

## Phonology

+Accuracy  
+Automaticity

## Lexis

+Accuracy  
+Automaticity

## Morphology

+Accuracy  
+Automaticity

## Syntax

+Accuracy  
+Automaticity

# Measures

Syntax  
+Accuracy  
+Automaticity

Set of tests for each language

- **Receptive** Tasks

- Syntactic accuracy: Grammaticality Judgment Task (GJT)

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*Test taker sees (or hears) a sentence:*

“The researchers was running some tests.”

*Test taker decides if it is acceptable or not acceptable*

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- Syntactic automaticity: Self-paced Reading task (SPR)

# Measures

Example: Self-paced Reading task (SPR)

*Test taker sees:*

---

\_\_\_\_\_

---

Syntax  
+Accuracy  
+Automaticity

- *Presses button to make next word appear*
- *Reaction times (RTs) recorded*
- *Slower RTs at errors indicate sensitivity to grammar*

# Measures

Set of tests for each language

Syntax  
+Accuracy  
+Automaticity

- **Receptive** Tasks

- Syntactic accuracy: Grammaticality Judgment Task (GJT)
- Syntactic automaticity: Self-paced Reading task (SPR)

- Linguistic features selected on the basis of:

- reviews of previous research
- interviews with experienced teachers
- interviews with advanced learners (OPI sample)
- reviews of textbooks for advanced levels

- Languages:

- Russian, Chinese, Persian



# Research Questions

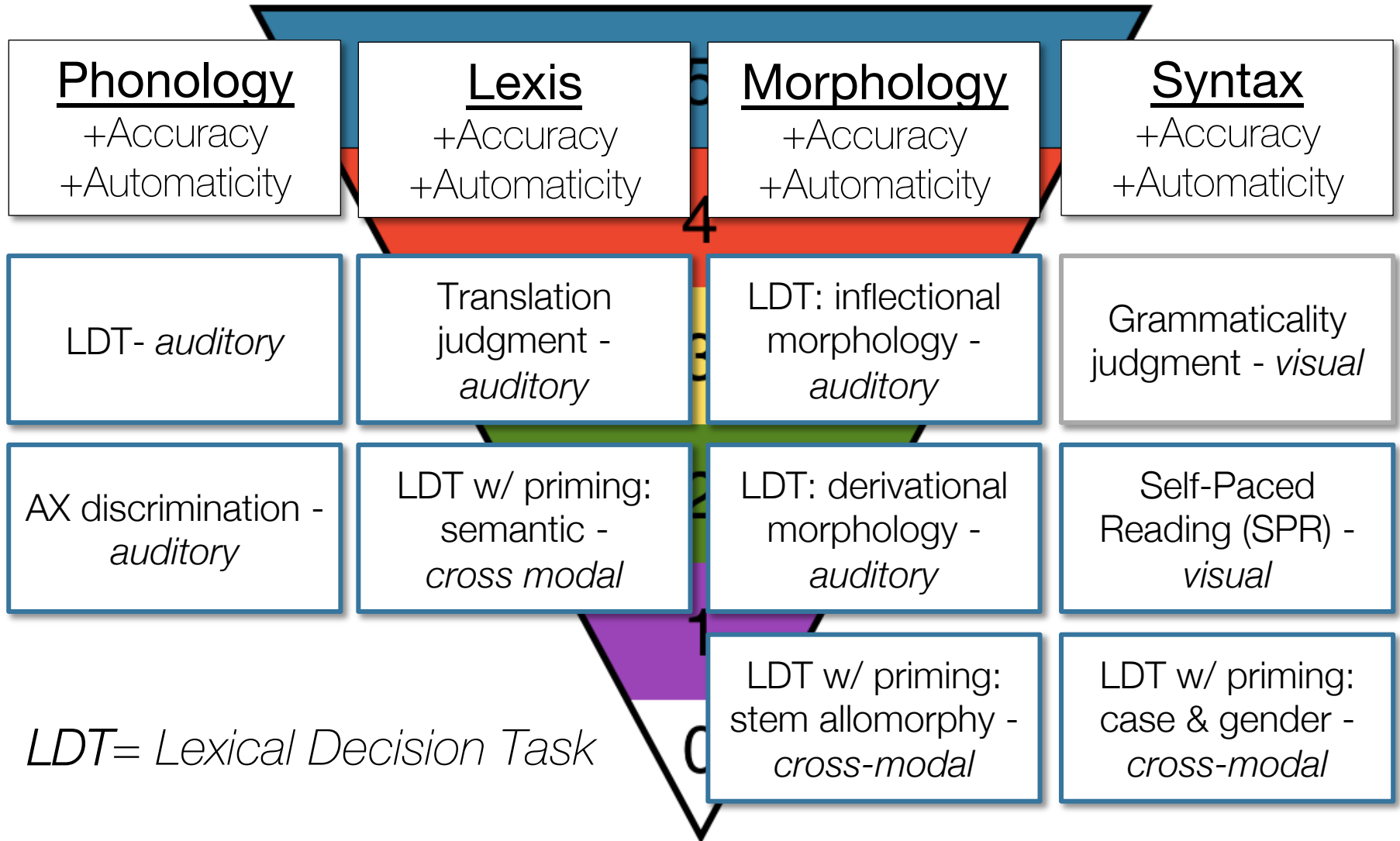
1. Which **linguistic features** of Russian, Chinese, and Persian correlate with ILR proficiency levels 2, 2+, and 3 on the ILR scale?
2. At what **level of control** do these linguistic features correlate with ILR proficiency levels 2, 2+, and 3 on the ILR scale?

(cf. Long, Gor & Jackson, 2012)

# Procedure

- After initial screening, learners who were expected to score ILR 2 to 3+ were selected
- Participants took an official Oral Proficiency Interview (OPI)
- Participants completed the LCP battery, delivered via remote DMDX (Forster & Forster, 2003)

# Overview of Russian LCP tests



# Russian

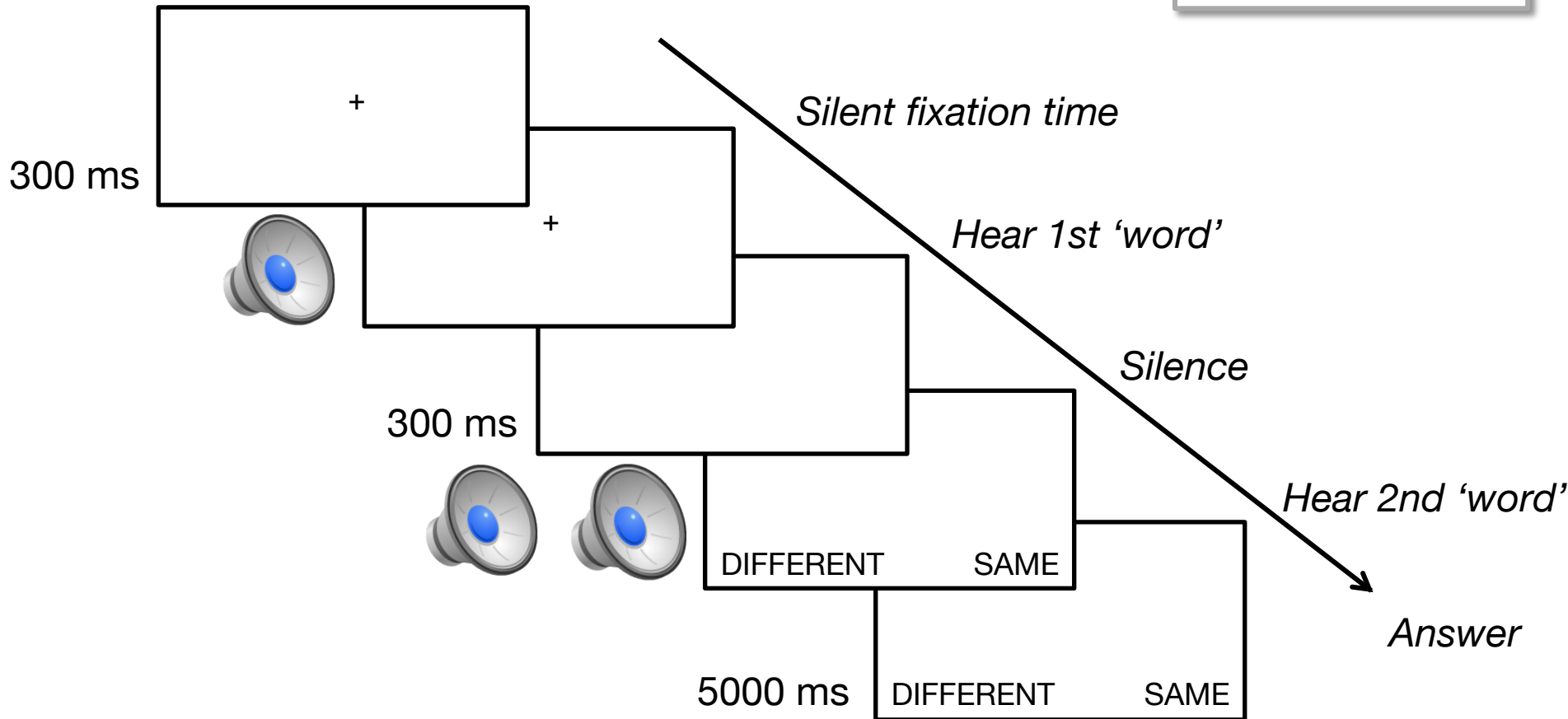
AX discrimination -  
*auditory*

- AX discrimination task (same-different)
- Measured response times to
  - Difficult vs. easy sounds
  - Frequent vs. infrequent sounds

|                        | High probability | Low probability |
|------------------------|------------------|-----------------|
| Perceptually easy      | /ni/             | /mi/            |
| Perceptually difficult | /mɪ/             | /nɪ/            |

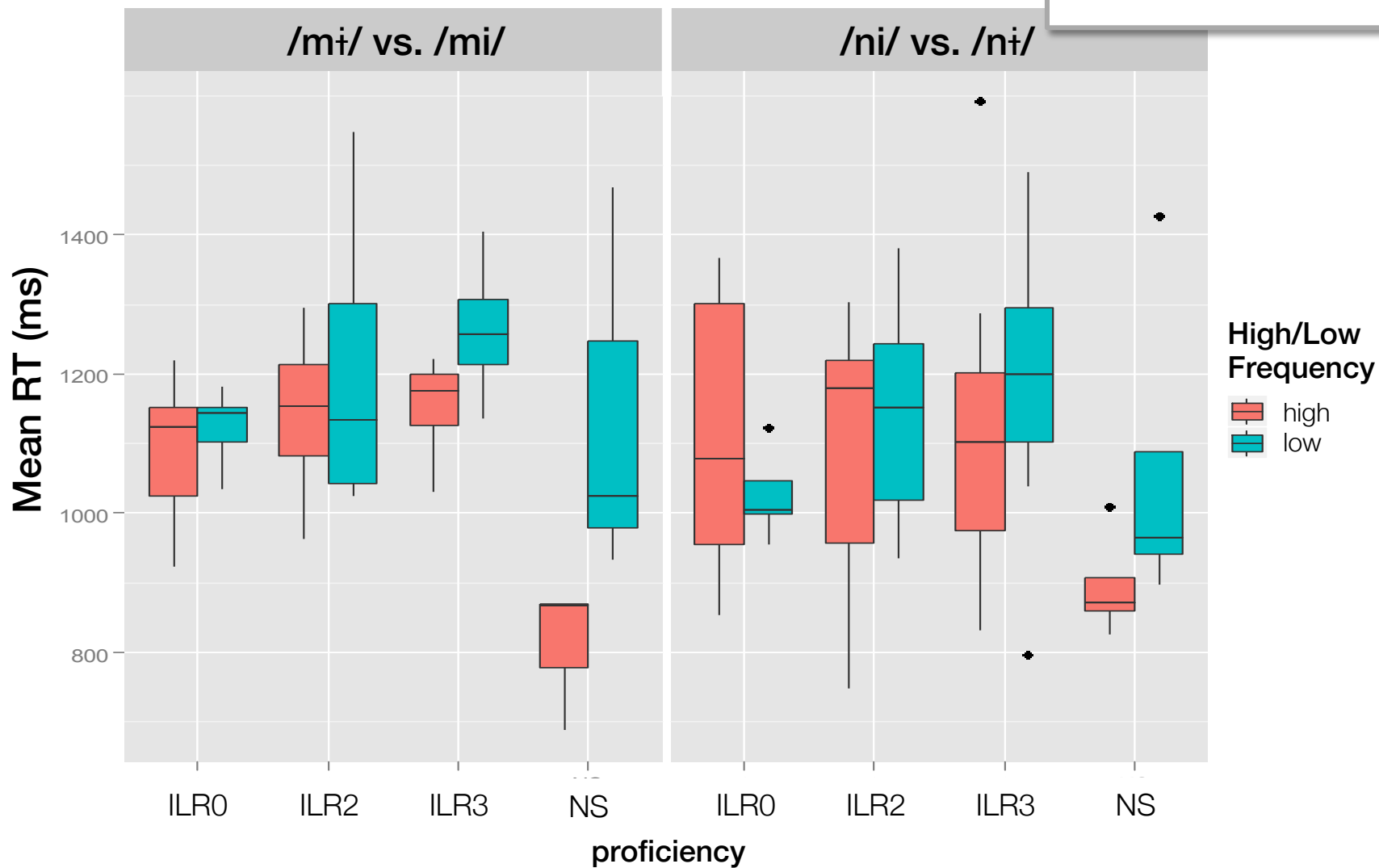
# Russian

AX discrimination -  
*auditory*

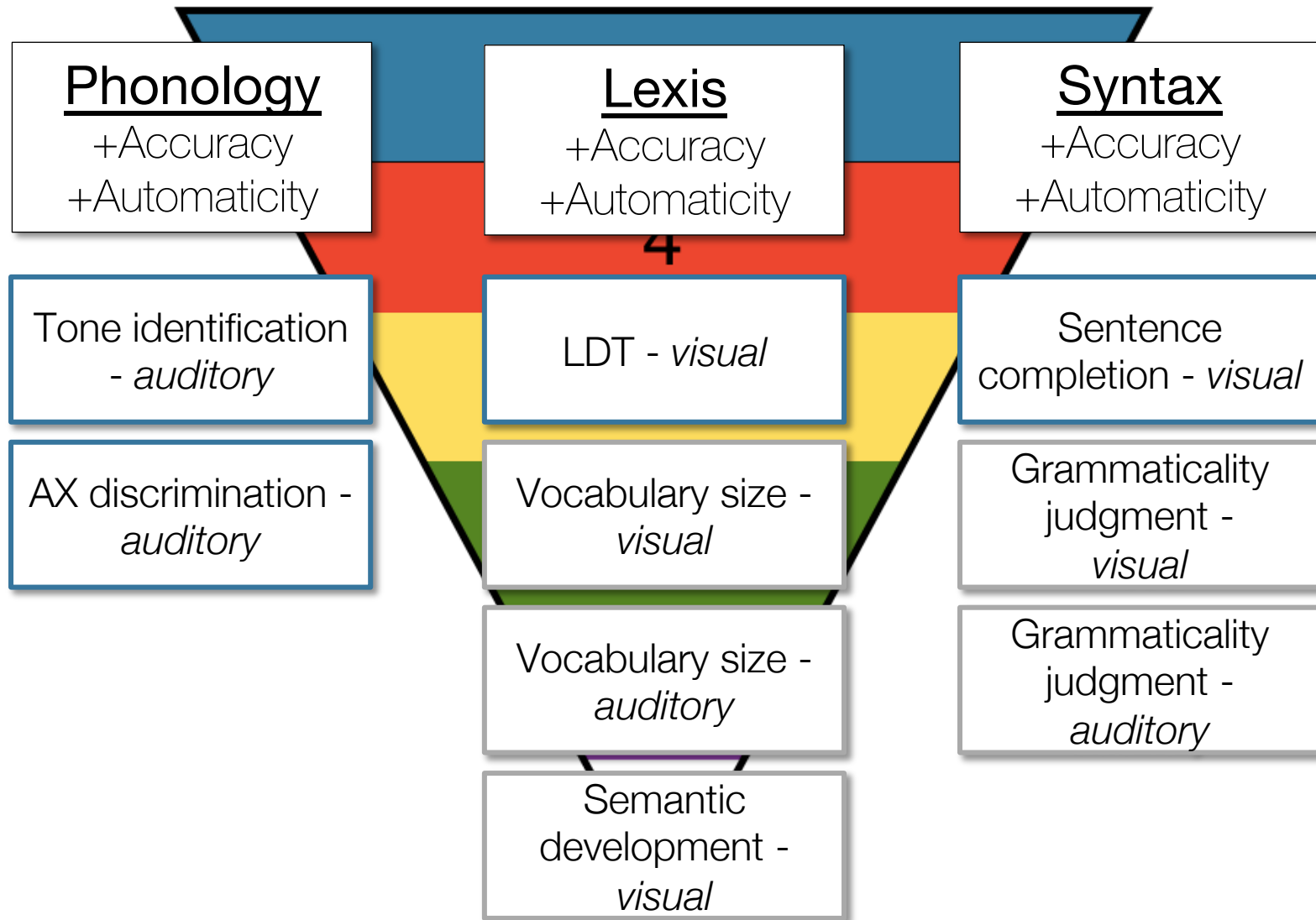


# Russian

AX discrimination -  
*auditory*



# Overview of Chinese LCP tests



# Chinese

Vocabulary Size -  
*auditory*

- 100 multiple choice items
- 10 words each from 1000 item frequency bands starting at the 6000th most frequent word and ending with the 15,999th
- Example:

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*Test taker hears:*

kāngkǎi (慷慨)

*Four choices appear onscreen:*

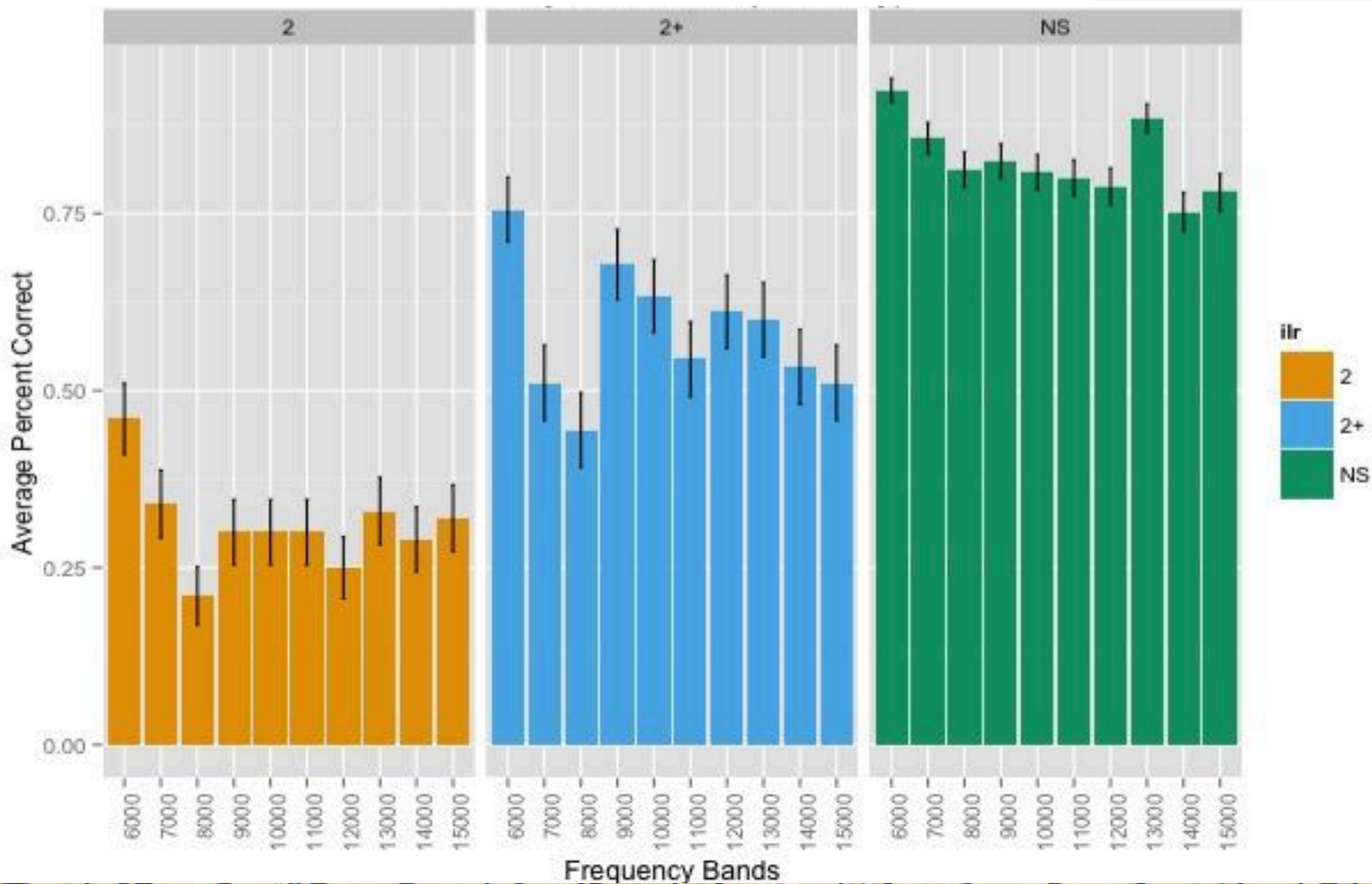
1. generous      2. indignant      3. touched      4. selfish

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# Chinese

Vocabulary Size -  
*auditory*



# Chinese

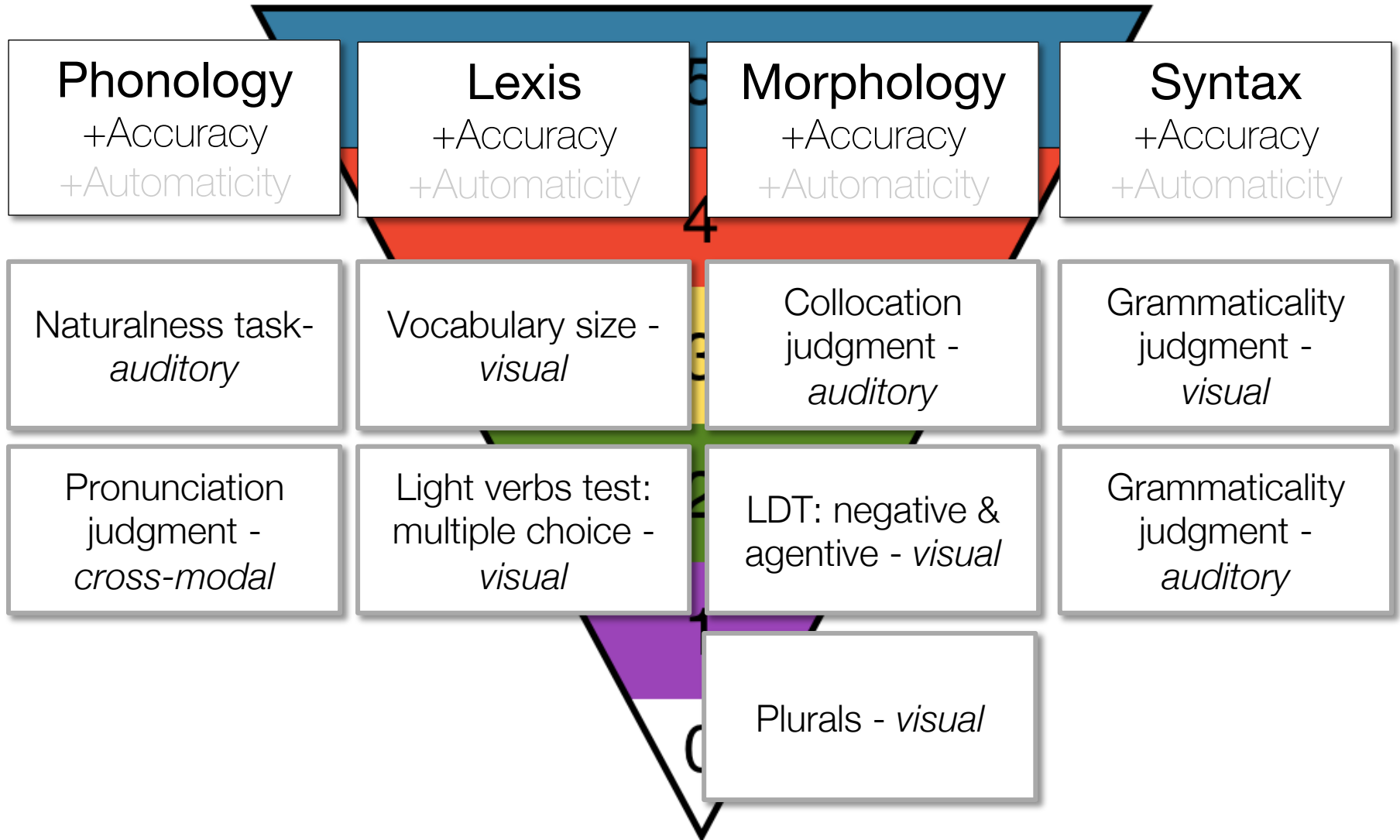
Vocabulary Size -  
*auditory*

| ILR Level | Mean<br>Vocab Size | sd    | range         |
|-----------|--------------------|-------|---------------|
| ILR 2     | 4,960              | 1,120 | 3,360-7,360   |
| ILR 2+    | 9,279              | 1,140 | 7,040-12,080  |
| NS        | 13,119             | 800   | 11,999-14,719 |

## Limitations:

- Exploratory in nature (cf. Shen, 2009; Chao et al., 1967)
- Few L2 participants (n=24 total), especially  $\geq$  ILR 3 (n=2)
- Item analysis needs to be done to improve test items
- Current format requires NS to understand English in order to answer accurately

# Overview of Persian LCP tests



# Persian

- Linguistic features and tasks: ten different receptive-based test tasks. For example:
  - Phonological knowledge: e.g., **Persian Vowels** and **Liquids** through a **“Naturalness Task”**
  - Lexical knowledge: e.g, **Persian light verbs** through a **Multiple Choice (MC) task**
  - Morphological knowledge: e.g., **negatives** and **Agentives** through **Lexical Decision Task (LDT)**
  - Syntactic knowledge: e.g., **Accusative “Ra”**, **subject-verb agreement** through **audio and visual GJTs**.

# Answer

1. Which linguistic features of Russian, Chinese, and Persian correlate with ILR proficiency levels 2, 2+, and 3 on the ILR scale?
2. At what level of control do these linguistic features correlate with ILR proficiency levels 2, 2+, and 3 on the ILR scale?

Stay tuned!


# Limitations & Future Directions

- Find large numbers of  $\geq$  ILR 3 proficiency LCTL learners
- Improve current batteries
- Replace tests that do not discriminate ILR levels
- Establish lists or relevant linguistic correlates
- Target additional LCTLs--Korean and Arabic
- Systematize selection of relevant features
- Find ways to compare results across languages
- Determine practical usefulness (or lack) of psycholinguistic batteries (e.g., speed training)

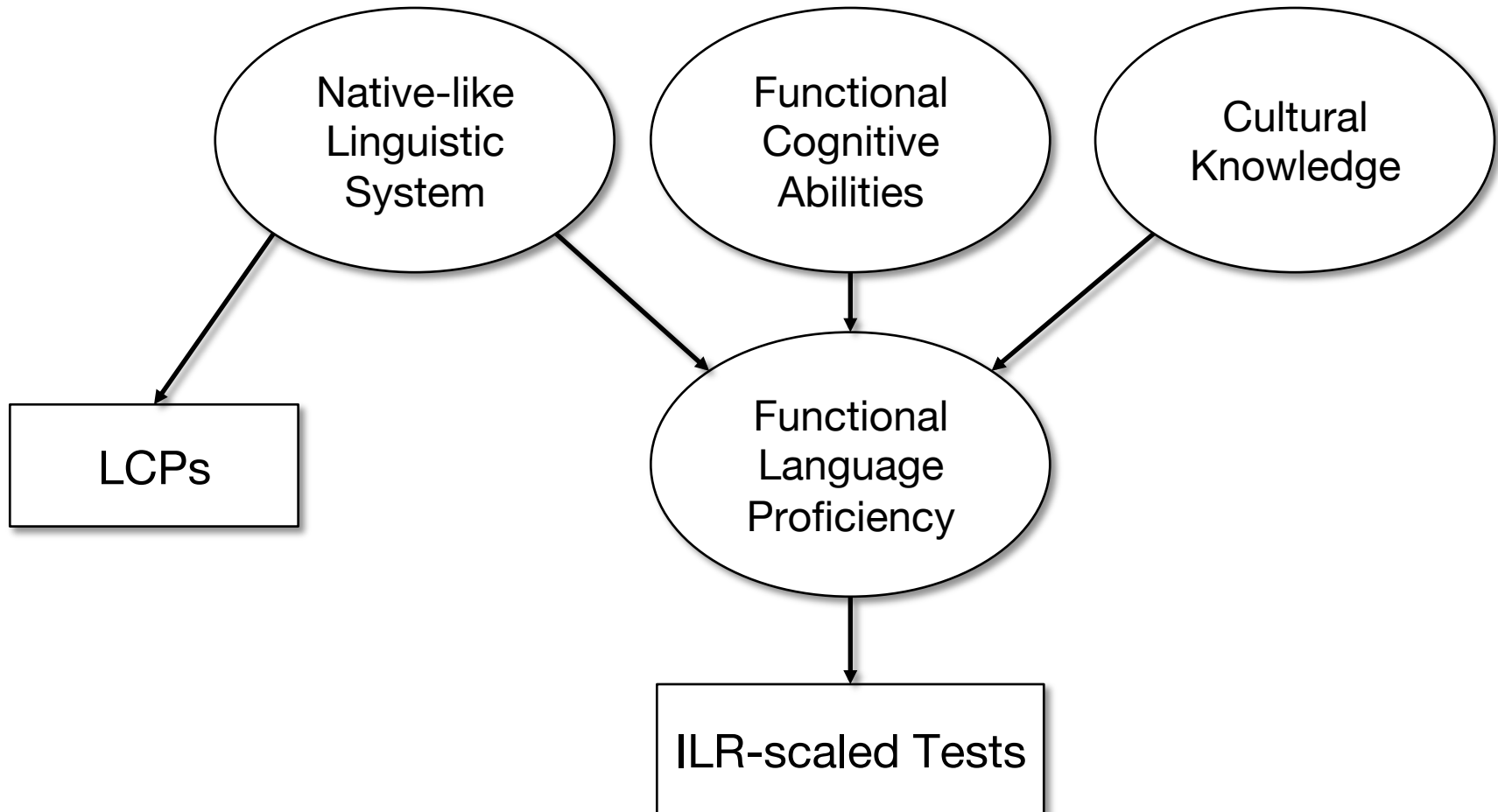


Спасибо!  
谢谢!  
با تشکراز شما!  
*Thank you!*

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# LCP relation to functional proficiency



A 'pre-theoretic' model of the link between LCP and functional proficiency



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